

is such that in a cross-section of the polymer matrix surrounded rubber nodules at least 90% of the total area occupied by the nodules corresponds to capsules having a diameter ranging from 0.1 to 1.0  $\mu\text{m}$ , or else

is such that it comprises multi-occlusion nodules and is such that in one of its sections

20 to 60% of the total area occupied by the particles corresponds to particles having a diameter ranging from 0.1 to 1  $\mu\text{m}$ ,

5 to 20% of the total area occupied by the particles corresponds to particles having a diameter ranging from 1 to 1.6  $\mu\text{m}$ , and

20 to 75% of the total area occupied by the particles corresponds to particles having a diameter of greater than 1.6  $\mu\text{m}$ ,

said step being such that:

-if (SFR) represents the number of moles of stable free radical in the polymerization mixture,

-if  $F_{\text{SFR}}$  represents the functionality of the stable free radical, i.e. the number of sites on the same molecule of stable free radical having the stable free radical state,

-if (INIT) represents the number of moles of polymerization initiator in the polymerization mixture before phase inversion, and

-if  $F_{\text{INIT}}$  represents the functionality of the initiator introduced before phase inversion, i.e. the number of sites having the free radical state that each molecule of initiator is capable of generating, then:

$$0.05 < \frac{F_{\text{SFR}} \times (\text{SFR})}{F_{\text{INIT}} \times (\text{INIT})} < 1.$$

12. (Twice Amended) Process according to claim 1, characterized in that:

-in the 0.1 to 1  $\mu\text{m}$  size range, more than 95% of the particles have the salami or capsule morphology,

-in the 1 to 1.6  $\mu\text{m}$  size range, more than 95% of the particles have the onion or salami morphology, and

-in the greater than 1.6  $\mu\text{m}$  size range, more than 95% of the particles have the salami morphology.

13. (Twice Amended) Process according to claim 1, characterized in that:

-in the 0.1 to 1  $\mu\text{m}$  size range, more than 95% of the particles have the capsule or onion or labyrinth morphology,

-in the 1 to 1.6  $\mu\text{m}$  size range, more than 95% of the particles have the onion or labyrinth morphology, and

-in the greater than 1.6  $\mu\text{m}$  size range, more than 95% of the particles have the labyrinth morphology.

C3  
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C3  
14. (Twice Amended) Process according to claim 1, characterized in that the distribution of the diameters of nodules is bimodal.

C3  
18. (Twice Amended) Process according to claim 1, characterized in that the composition is such that, in one of its cross-sections, at least 90% of the total area occupied by the particles corresponds to capsules having a diameter.

34. (Twice Amended) A composition capable of being obtained by the process of one of claims 1-10 or 12-33.

C4  
35 (Twice Amended) Composition according to claim 34 comprising a stable free radical which is in a free form or in a form linked to a polymer chain by a covalent bond, comprising a matrix of vinylaromatic polymer surrounding rubber nodules, characterized in that the composition comprises multi-occlusion nodules and is such that, in one of its cross-sections,

-20 to 60% of the total area occupied by the particles corresponds to particles having a diameter ranging from 0.1 to 1  $\mu\text{m}$ ,

5 to 20% of the total area occupied by the particles corresponds to particles having a diameter ranging from 1 to 1.6  $\mu\text{m}$ , and

20 to 75% of the total area occupied by the particles corresponds to particles having a diameter of greater than 1.6  $\mu\text{m}$ .

C5  
38. (Twice Amended) Composition according to one of Claims 34-37, characterized in that the distribution of the diameters of nodules is bimodal.

C6  
42. (Twice Amended) Composition according to Claim 34, characterized in that the composition is such that, in one of its cross-sections, at least 90% of the total area occupied by the particles corresponds to capsules having a diameter ranging from 0.1 to 1  $\mu\text{m}$ .

A marked-up version of the above amended claims pursuant to 37 C.F.R. § 1.121(c)(1)(ii) is attached for the Examiner's review in Appendix A.